

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claim 1 (amended): A bisphenolic composition comprising:

from about 99% to about 85%, based on the weight of the composition, of a
bisphenolic stillbottom; and

from about 1% to about 15%, based on the weight of the composition, of a
solvent;

wherein the bisphenolic composition is a single phase and the sum of the
percentage of bisphenolic stillbottom present in the composition and the percentage of the
solvent in the bisphenolic stillbottom is about 100%.

Claim 2 (cancelled)

Claim 3 (currently amended): The solution of Claim [[2]] 1 wherein the bisphenolic
stillbottom is present in an amount of from about 99% to about 90% and the solvent is
present in an amount of from about 1% to about 10%.

Claim 4 (currently amended): The solution of Claim [[2]] 1 wherein the bisphenolic
stillbottom comprises:

p,p-Bisphenol A	10% – 84%;
o,p-Bisphenol A	0% – 30%;
Trisphenol	10% – 25%;
Chroman-I	0% – 3%;
Phenol	0% – 25%; and
Other Phenol-Acetone	45% – 75%
Reaction Products;	

wherein, the phenol-acetone reaction products do not include p,p-Bisphenol A,
o,p-Bisphenol A, trisphenol, Chroman I, and phenol.

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Claim 5 (original): The solution of Claim 1 wherein the solvent is selected from the group consisting of water, acetone, methylethylketone, isopropyl alcohol, phenol and toluene.

Claim 6 (original): The solution of Claim 5 wherein the solvent is water.

Claim 7 (original): The solution of Claim 5 wherein the solvent is a mixture of water and acetone.

Claim 8 (original): A method for making a stable composition of a bisphenolic stillbottom and a solvent, the method comprising the steps of:

heating the bisphenolic stillbottom to a temperature of from about 65°C to about 170°C;

adding the solvent to the heated bisphenolic stillbottom; and

mixing the solvent and the bisphenolic stillbottom for a period of time sufficient for the solvent and the bisphenolic stillbottom to form a single-phase composition.

Claim 9 (original): The method of Claim 8 wherein the bisphenolic stillbottom is heated to a temperature of from about 120°C to about 150°C.

Claim 10 (original): The method of Claim 8 wherein the bisphenolic stillbottom and the solvent are mixed for about 30 minutes to about 60 minutes.

Claim 11 (original): The method of Claim 8 further comprising refluxing the solvent.

Claim 12 (original): The method of Claim 8 wherein the temperature of the solvent at the time the solvent is added to the bisphenolic stillbottom is from about 25°C to about 40°C.

Claim 13 (original): The method of Claim 8 wherein the solvent is selected from the group consisting of water, acetone, methylethylketone, isopropyl alcohol, phenol and toluene.

Claim 14 (original): The method of Claim 13 wherein the solvent is water.

Claim 15 (original): The method of Claim 13 wherein the solvent is a mixture of water and acetone.

Claim 16 (original): A method for making a stable composition of a bisphenolic stillbottom and a solvent, the method comprising the steps of:

heating the bisphenolic stillbottom to a temperature of from about 65°C to about 170°C;

metering the solvent into the bisphenolic stillbottom over a period of time ranging from about 5 minutes to about 60 minutes while mixing the bisphenolic stillbottom; and

mixing the bisphenolic stillbottom and the solvent for a period of time ranging from about 5 minutes to about 30 minutes.

Claim 17 (original): The method of Claim 16 wherein the bisphenolic stillbottom is heated to a temperature of from about 120°C to about 150°C.

Claim 18 (original): The method of Claim 16 further comprising refluxing the solvent.

Claim 19 (original): The method of Claim 16 wherein the temperature of the solvent at the time the solvent is added to the bisphenolic stillbottom is from about 25°C to about 40°C.

Claim 20 (original): The method of Claim 16 wherein the solvent is selected from the group consisting of water, acetone, methylethylketone, isopropyl alcohol, phenol and toluene.

Claim 21 (original): The method of Claim 20 wherein the solvent is water.

Claim 22 (original): The method of Claim 20 wherein the solvent is a mixture of water and acetone.

Claim 23 (original): The product of mixing:

a bisphenolic stillbottom having a temperature of from about 65°C to about 170°C;
and
a solvent;
wherein the product is a single-phase composition.

Claim 24 (original): The product of Claim 23 wherein the bisphenolic stillbottom has a temperature of from about 120°C to about 150°C.

Claim 25 (original): The product of Claim 23 wherein the solvent is selected from the group consisting of water, acetone, methylethylketone, isopropyl alcohol, phenol and toluene.

Claim 26 (original): The product of Claim 25 wherein the solvent is water.

Claim 27 (original): The product of Claim 25 wherein the solvent is a mixture of water and acetone.

Claim 28 (original): A resin comprising:
a condensate of a phenolic compound, an aldehyde and a single-phase composition of a bisphenolic stillbottom and a solvent.

Claim 29 (original): The resin of Claim 28 wherein the phenolic compound is selected from the group consisting of phenol, cresol, xlenol, alkyl substituted phenol, bisphenol A, bisphenol F, and combinations thereof.

Claim 30 (original): The resin of Claim 28 wherein the aldehyde is selected from the group consisting of formaldehyde, acetaldehyde, propionaldehyde, n-butyraldehyde, isobutyraldehyde, benzaldehyde, glyoxal, furfural, and combinations thereof.

Claim 31 (original): The resin of Claim 28 wherein the single-phase composition comprises:

an amount of the bisphenolic stillbottom of from about 99% to about 85% based on the weight of the solution; and

an amount of the solvent of from about 1% to about 15% based on the weight of the solution.

Claim 32 (original): The resin of Claim 28 further comprising an alcohol.

Claim 33 (original): The resin of Claim 28 wherein the solvent is selected from the group consisting of water, acetone, methylethylketone, isopropyl alcohol, and toluene.

Claim 34 (original): The resin of Claim 33 wherein the solvent is water.

Claim 35 (original): The resin of Claim 33 wherein the solvent is a mixture of water and acetone.

Claim 36 (original): A resin comprising the product of mixing and reacting:
a phenolic compound;
an aldehyde; and
a single-phase composition of a bisphenolic stillbottom and a solvent.

Claim 37 (original): The resin of Claim 36 wherein the phenolic compound is selected from the group consisting of phenol, cresol, xlenol, alkyl substituted phenol, bisphenol A, bisphenol F, and combinations thereof.

Claim 38 (original): The resin of Claim 36 wherein the aldehyde is selected from the group consisting of formaldehyde, acetaldehyde, propionaldehyde, n-butyraldehyde, isobutyraldehyde, benzaldehyde, glyoxal, furfural, and combinations thereof.

Claim 39 (original): The resin of Claim 36 wherein the single-phase composition comprises:

an amount of the bisphenolic stillbottom of from about 99% to about 85% based on the weight of the solution; and

an amount of the solvent of from about 1% to about 15% based on the weight of the solution.

Claim 40 (original): The resin of Claim 39 wherein the single-phase composition comprises:

an amount of bisphenolic stillbottom of from about 99% to about 90%; and
an amount of the solvent of from about 1% to about 10%.

Claim 41 (original): The resin of Claim 36 wherein the solvent is selected from the group consisting of water, acetone, methylethylketone, isopropyl alcohol, phenol and toluene.

Claim 42 (original): The resin of Claim 41 wherein the solvent is water.

Claim 43 (original): The resin of Claim 41 wherein the solvent is a mixture of water and acetone.

Claim 44 (original): A method of making a resin, the method comprising:

mixing and reacting a phenolic compound, an aldehyde, and a resole catalyst to produce a reaction product;

determining a water tolerance of the reaction product;

adding a bisphenolic compound to the reaction product when the water tolerance is from about 400% to about 1100%; and

mixing and reacting the reaction product and the bisphenolic compound.

Claim 45 (original): The method of Claim 44 wherein the phenolic compound is selected from the group consisting of phenol, cresol, xylenol, alkyl substituted phenol, bisphenol A, bisphenol F, and combinations thereof.

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Claim 46 (original): The method of Claim 44 wherein the aldehyde is selected from the group consisting of formaldehyde, acetaldehyde, propionaldehyde, n-butyraldehyde, isobutyraldehyde, benzaldehyde, glyoxal, furfural, and combinations thereof.

Claim 47 (original): The method of Claim 44 wherein the resole catalyst is selected from the group consisting of sodium hydroxide, sodium carbonate, alkaline earth oxides, alkaline earth hydroxides, ammonia, HMTA, and tertiary amines.

Claim 48 (original): The method of Claim 44 wherein the resole catalyst is a divalent metal salt.

Claim 49 (original): The method of Claim 44 wherein the bisphenolic compound is a bisphenolic stillbottom.

Claim 50 (original): The method of Claim 44 wherein the bisphenolic compound is bisphenol A.

Claim 51 (original): The method of Claim 44 wherein the bisphenolic compound is bisphenol F.

Claim 52 (original): The method of Claim 44 wherein the bisphenolic compound is a single-phase composition of bisphenolic stillbottom and a solvent.

Claim 53 (original): The method of Claim 52 wherein the single-phase composition comprises an amount of the bisphenolic stillbottom of from about 99% to about 85% based on the weight of the solution; and an amount of the solvent of from about 1% to about 15% based on the weight of the solution.

Claim 54 (original): A method of making a resin, the method comprising:
mixing and reacting a phenolic compound, an aldehyde, a bisphenolic stillbottom and a novolac catalyst to produce a reaction product.

Claim 55 (original): The method of Claim 54 wherein the bisphenolic compound is a single-phase composition of bisphenolic stillbottom and a solvent.

Claim 56 (original): The method of Claim 54 wherein the single-phase composition comprises an amount of the bisphenolic stillbottom of from about 99% to about 85% based on the weight of the solution; and an amount of the water of from about 1% to about 15% based on the weight of the solution.

Claim 57 (original): A resin comprising the product of mixing and reacting:
a reaction product comprising the product of mixing and reacting a phenolic compound, an aldehyde, and a resole catalyst, the reaction product having a water tolerance of from about 400% to about 1100%; and
a bisphenolic compound.

Claim 58 (original): The resin of Claim 57 wherein the phenolic compound is selected from the group consisting of phenol, cresol, xylenol, alkyl substituted phenol, bisphenol A, bisphenol F, bisphenolic stillbottoms, and combinations thereof.

Claim 59 (original): The resin of Claim 57 wherein the bisphenolic compound is a bisphenolic stillbottom.

Claim 60 (original): The resin of Claim 57 wherein the bisphenolic compound is a single-phase composition of bisphenolic stillbottom and a solvent.

Claim 61 (original): The resin of Claim 57 wherein the single-phase composition comprises an amount of the bisphenolic stillbottom of from about 99% to about 85% based on the weight of the solution; and an amount of the solvent of from about 1% to about 15% based on the weight of the solution.

Claim 62 (original): A resin impregnated product comprising:

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a substrate; and
an effective amount of the resin of Claim 28;
wherein the substrate is impregnated with the resin.

Claim 63 (original): A resin impregnated product comprising:

a substrate; and
an effective amount of the resin of Claim 32;
wherein the substrate is impregnated with the resin.

Claim 64 (original): A resin impregnated product comprising:

a substrate; and
an effective amount of the resin of Claim 36;
wherein the substrate is impregnated with the resin.

Claim 65 (new): A bisphenolic composition comprising:

a bisphenolic stillbottom; and
a solvent;
wherein the bisphenolic composition is a single phase and the solvent is
selected from the group consisting of water, acetone, methylethylketone, isopropyl alcohol,
and phenol.